

## **REMARKS**

The Applicant wishes to express appreciation for the Examiner's recognition that claims 1-4 and 6-8 are allowable.

### **Amendments to the Claims**

Claim 9 has been amended to clarify the language used in the claim in light of the recent Federal Circuit decision in *SuperGuide Corp. v. DirecTV Enterprises, Inc., et al.*, 358 F.3d 870 (Fed. Cir. 2004). The Applicant submits that no new matter has been added by these amendments.

### **Rejections of Claims**

Claims 1-22 were originally filed in the Application on July 18, 2003. Claims 5 and 16 were cancelled in an amendment filed April 4, 2005, in response to an Office action mailed November 3, 2004. Claims 1-4 and 6-8 were allowed, and claims 9-15 and 17-22 stand rejected in an Office action mailed August 26, 2005. Claims 1, 9, 12, and 20 are independent claims. Claims 2-4 and 6-8, 10-11, 13-15 and 17-19, and 21-22 depend either directly or indirectly from independent claims 1, 9, 12, and 20, respectively. The Applicant requests reconsideration of the pending claims 9-15 and 17-22, in light of the following remarks.

### **Rejection of Claims Under 35 U.S.C. §102**

Claims 9-13 and 17-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Eshmawy et al. (U.S. Patent No. 6,751,203, hereinafter "Eshmawy") The Applicant respectfully traverses the rejection.

With regard to the anticipation rejections, MPEP 2131 states, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 2 USPQ2d 1051, 1053 (Fed.Cir. 1987). MPEP 2131 also states, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Regarding amended claim 9, the Applicant respectfully submits that the Eshmawy reference does not teach, suggest, or disclose, for example, a combined sidetone and hybrid balance apparatus comprising a first signal path carrying a first signal; a second signal path carrying a second signal; a mode input having at least a first state and a second state; a reconfigurable filter for modifying at least one of the following: the first signal and the second signal; and wherein the apparatus generates a sidetone signal in the first signal by combining at least a portion of the second signal with the first signal when the mode input is in the first state, and cancels an echo in the second signal by subtracting at least a portion of the first signal from the second signal when the mode input is in the second state. More specifically, Eshmawy fails to teach a mode input having at least a first and second state, as recited in claim 9. In that the Office action has failed to clearly and specifically identify the teaching of Eshmawy that corresponds to the combined sidetone and hybrid balance apparatus recited in Applicant's claim 9, Applicant hereby assumes that the DSP (412) of Fig. 4 has been identified as corresponding to the combined sidetone and hybrid balance apparatus recited in Applicant's claim 9. Applicant respectfully requests notice if this is in error, and further requests that the teaching of Eshmawy alleged to correspond to the combined sidetone and hybrid balance apparatus be specifically identified. The Office action asserts that Eshmawy teaches that "[t]he generator, although not shown, includes an input for value  $g_{echo}$  described in column 4, lines 43-65. The value of  $g_{echo}$  swings between 0 and 1 and controls the amount of side tone applied to the first signal path, suggesting its correspondence to the mode input having at least a first state and a second state as claimed." (Office action, item 1, page 2) The Applicant disagrees. Applicant respectfully submits that the value of  $g_{echo}$  is an output of the side tone gain adapter (424 of Fig. 4), that is a part of the side tone generator (418 of Fig. 4). Since the side tone generator (418) is part of the DSP (412) that is assumed to correspond to the combined sidetone and hybrid balance apparatus recited in Applicant's claim 9, the value  $g_{echo}$  is produced from within the DSP (412) and is, in fact, a form of feedback and is not an input of the combined sidetone and hybrid balance apparatus, as the Office action asserts. The Eshmawy reference, therefore, fails to teach "a mode input having at least a first state and a second state", as recited in Applicant's claim 9.

Therefore, Applicant respectfully submits that Eshmawy is different from and fails to anticipate Applicant's invention as set forth in claim 9, for at least the reasons set forth above. Because claims 10 and 11 depend from claim 9, Applicant respectfully submits that Eshmawy is different from and fails to anticipate claims 10 and 11, as well. Therefore, Applicant believes

that claims 9-11 are allowable over the Eshmawy reference, and respectfully requests that the rejection of claims 9-11 under 35 U.S.C. §102(e), be withdrawn.

Regarding claim 12, Applicant respectfully submits that the Eshmawy reference does not teach, suggest, or disclose, for example, a method of operating a combined sidetone and hybrid balance apparatus, the method comprising receiving a first input signal; receiving a second input signal; when in a first mode of operation, filtering the second input signal using a first predetermined set of filter coefficients; combining the first input signal and the filtered second input signal to produce a combined signal; transmitting the combined signal on a first output; and transmitting the second input signal on a second output, and when in a second mode of operation, filtering the first input signal using a second predetermined set of filter coefficients; transmitting the first input signal on the first output; combining the second input signal and the filtered first input signal to produce a combined signal; and transmitting the combined signal on the second output. More specifically, Eshmawy fails to teach, suggest, or disclose filtering the second input signal using a first predetermined set of filter coefficients when in a first mode of operation, and filtering the first input signal using a second predetermined set of filter coefficients when in a second mode of operation. Eshmawy is silent with respect to the use of first and second sets of predetermined filter coefficients. To the contrary, Eshmawy teaches that the filter (430) of Fig. 4 adapts, and that “the filter input signal and the echo cancellation output signal, along with the microphone input frame, are used to update echo cancellation filter coefficients.” (col. 6, l. 60; Fig. 5, col. 7, ll. 32-35) The Applicant, therefore, respectfully submits that Eshmawy fails to teach all of the limitations of Applicant’s claim 12.

Therefore, Applicant respectfully submits that Eshmawy is different from and fails to anticipate Applicant’s invention as set forth in claim 12, for at least the reasons set forth above. Because claims 13-15 and 17-19 depend from claim 12, Applicant respectfully submits that Eshmawy is different from and fails to anticipate claims 13-15 and 17-19, as well. Therefore, Applicant believes that claims 12, 13 and 17-19 are allowable over the Eshmawy reference, and respectfully requests that the rejection of claims 12, 13 and 17-19 under 35 U.S.C. §102(e), be withdrawn.

Regarding claim 20, Applicant respectfully submits that the Eshmawy reference does not teach, suggest, or disclose, for example, a method of operating a combined sidetone and hybrid balance apparatus having a first signal path and a second signal path, the method comprising receiving a control signal having at least a first state and a second state; configuring an electrical circuit based upon the control signal; generating a sidetone signal in the first signal path by adding at least a portion of the signal from the second signal path to the signal in the first signal path if the control signal is in the first state; and canceling an echo signal in the second signal path by subtracting from the signal in the second signal path a modified version of the signal in the first signal path if the control signal is in the second state. More specifically Eshmawy fails to teach, suggest or disclose receiving a control signal having at least a first state and a second state. The Office action asserts that “[a]s previously indicated in the rejections of claims 9 and 12, a signal  $g_{echo}$  is received, where the signal assumes the value of 0 and 1.” (Office action, page 4) As discussed above with respect to claim 9, the value  $g_{echo}$  is a feedback signal that originates **within** the DSP (412) of Fig. 4 of Eshmawy, and is therefore not an input, as recited in Applicant’s claim 20. The Applicant, therefore, respectfully submits that Eshmawy fails to teach all of the limitations of Applicant’s claim 20.

Therefore, Applicant respectfully submits that Eshmawy is different from and fails to anticipate Applicant’s invention as set forth in claim 20, for at least the reasons set forth above. Because claims 21 and 22 depend from claim 20, Applicant respectfully submits that Eshmawy is different from and fails to anticipate claims 21 and 22, as well. Therefore, Applicant believes that claims 20-22 are allowable over the Eshmawy reference, and respectfully requests that the rejection of claims 20-22 under 35 U.S.C. §102(e), be withdrawn.

### **Rejection of Claims Under 35 U.S.C. §103**

Claims 14 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Eshmawy et al. (U.S. Patent 6,751,203) in view of Lashley et al. (U.S. Patent Application Publication 2004/0052358, hereinafter “Lashley”). The Applicant respectfully traverses the rejection. Applicant respectfully submits that claims 14 and 15 depend from independent claim 12. Applicant believes that claim 12 is allowable over the proposed combination of the Eshmawy and

Lashley references, in that Lashley fails to overcome the deficiencies of Eshmawy. Because claims 14 and 15 are dependent claims depending from claim 12, Applicant respectfully submits that claims 14 and 15 are also allowable, for at least the reasons set forth above. Therefore, Applicant respectfully requests that the rejection of claims 14 and 15 under 35 U.S.C. §103(a) be withdrawn.

### Conclusion

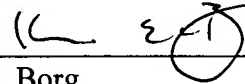
The Applicant wishes to express appreciation for the Examiner's recognition that claims 1-4 and 6-8 are allowable, and believes that in light of the reasons set forth above, all of claims 1-4, 6-15, and 17-22 are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicant invites the Examiner to telephone the undersigned at (312) 775-8000.

A Notice of Allowability is courteously solicited.

The Commissioner is hereby authorized to charge any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 13-0017.

Respectfully submitted,

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